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FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. CONFIRMATION NO. 10/785,517 02/24/2004 Toshiaki Murai 1018.1203101 8324 EXAMINER 28075 06/22/2005 7590 CROMPTON, SEAGER & TUFTE, LLC NWAONICHA, CHUKWUMA O 1221 NICOLLET AVENUE ART UNIT PAPER NUMBER **SUITE 800** MINNEAPOLIS, MN 55403-2420 1621

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	ation No. Applicant(s)		
Office Action Summary			10/785,517	MURAI ET AL		
			Examiner	Art Unit		
			Chukwuma O. Nwaonicha	1621		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)	Responsive to communication(s) filed on					
2a) <u></u> □	☐ This action is FINAL . 2b) ☐ This action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-10</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>3-10</u> is/are allowed.						
	6)⊠ Claim(s) <u>1-2</u> is/are rejected. 7)□ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) 2 Paper No(s)/Mail Date						
3) 🛛 Infor	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:					
Paper No(s)/Mail Date 6)						

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DETAILED ACTION

Claims 1-10 are pending in the application.

Priority

Applicants' claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Sekar et al., {Improved synthesis of HN(SPPh₂)(SePPh₂) and some coordination chemistry of [N(SPPh₂)(SePPh₂)]⁻, Inorganica Chimica Acta, 319 (2001), 117-122}.

Sekar et al. disclose applicants claimed asymmetric phosphinoselenoic chloride {Ph₂P(Se)Cl}. See page 118, column 1, second paragraph, line 8.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Krawiecka, {Reaction of thiolo- and Selenolo Esters of Phosphorus Acids with Hologens Part 5. Halogenolysis of Selenium Methyl Phoshinoselenoates, Heteroatom Chemistry (1992), 3(4), 385-394}.

Krawiecka discloses phosphinoselenoic chloride compound of general formula 1

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formula 1

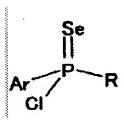
wherein R is t-Bu group. See footnote on page 390, scheme 4, compound` 23a.

Allowed Claims

Claims 3-10 are allowable over the prior art of record.

Reason For Allowance

The following is an examiner's statement of reasons for allowance: applicants' claim a method for producing an asymmetric phosphinoselenoic chloride of general formula 2,



formula 2

the method comprising: mixing arylphosphine dichloride, an organometallic reagent, and selenium in a solvent so as to cause a reaction of the arylphosphine dichloride, the organometallic reagent, and the selenium, wherein all the variables are as defined in the claims was neither found to be obvious nor anticipated by the prior art of record.

The closest prior art is Bayandina et al., {Synthesis of Arylselenophosphinic Acid Derivatives and their Properties, Zhurnal Obshchei Khimi (1978), 48 (12), 2673-2677}. Bayandina et al., discloses method for producing an asymmetric phosphinoselenoic chloride by heating arylphosphine chloride and selenium at 120°C. The two processes differ in that applicants' claim a process that employs arylphosphine dichloride and

organometallic reagent while Bayandina et al. disclose a process that employs arylphosphine chloride. See abstract.

A further search of the prior art failed to uncover any reference that taught or motivated one of ordinary skill to make and use an asymmetric phosphinoselenoic chloride of general formula 2 as claim by applicants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D. Patent Examiner

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J. PARSA
PRIMARY EXAMINER

Pur

Johann R. Richter, Ph.D., Esq. Supervisory Patent Examiner, Technology Center 1600 Page 5